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UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH ADMINISTRATION  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE  
WASHINGTON 25, D. C.

In Cooperation with State, Federal and other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING JUNE 7, 1947  
(Second Cotton Insect Survey Report for 1947)

Weather was generally favorable for cotton and the crop made satisfactory growth. Boll weevils are abundant in many cotton fields in the Atlantic and Gulf Coast States from South Carolina to Louisiana. The weevil situation is especially serious in South Carolina. There is danger of heavy damage. Cotton growers who have experienced losses from weevils during past years should be prepared to fight them, if necessary.

No shortages of calcium arsenate have been reported, but supplies are limited in some areas.

Intensive surveys have been made for cotton leafworms, but none have been reported thus far. The first cotton leafworm last year was collected near San Benito, Texas, on June 7. They often reach southern Texas during April and May.

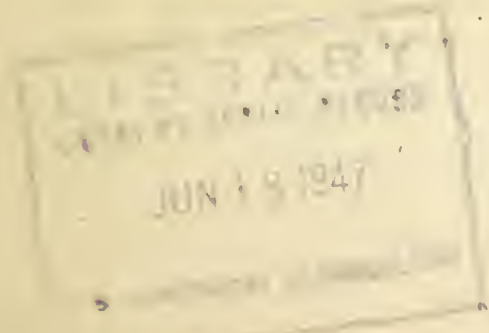
BOLL WEEVIL

SOUTH CAROLINA: Boll weevils continue to emerge from hibernation cages in the vicinity of Florence. During the week ending June 7, a total of 2.9% of the weevils installed last fall had emerged. This is the highest emergence of any recent year. The percentage of emergence during the first week of June follows:

<u>Year</u>	<u>Percent Emergence</u>
1947	2.92
1946	1.66
1945	1.34
1944	.2
1943	1.18
1942	1.74

The emergence of boll weevils into an early planted trap plot continued in large numbers. A total of 240 emerged during the week, making 641 thus far this season. The emergence into the trap plot as compared with previous years during the first week of June follows:

<u>Year</u>	<u>Number Emergence</u>
1947	641
1946	140
1945	377
1944	102
1943	238
1942	175





Examinations were made in 94 fields in 15 counties and boll weevils were found in 91, ranging from 306 to 1,700 per acre. In 1946 an average of 233 weevils per acre were found in 135 fields in 25 counties. In 1945 an average of 160 weevils per acre were found in 117 fields in 19 counties. There are more boll weevils in the fields now in South Carolina than during the first week of June since 1939.

GEORGIA: During the week ending June 6, 11 fields in Tift, Colquitt and Worth Counties were examined for weevils. An average of 3.7% of the squares were punctured in 9 of the fields and in two fields in Tift County no weevils were found. In one field in Worth County 13.6% of the squares were punctured. However, the average infestation is less in this area than it was during the first week of June a year ago.

ALABAMA: W. A. Ruffin, Extension Entomologist, wired June 9: "Pickens County farmers reported large number of adult weevils feeding in buds of cotton. One farmer collected 600 weevils from one acre of cotton. Houston County farmers reported last week 25% of squares punctured. Large number of weevils found feeding in buds of young cotton in this area." (Lee County).

Dr. F. S. Arant, Entomologist, Alabama Polytechnic Institute, Auburn, reported on June 9: "The cotton boll weevil is emerging in large numbers throughout most of Alabama. We do not have facilities for conducting a survey in various parts of the State but have made observations on recent reports from Macon, Montgomery, Elmore, Escambia, Covington, Geneva, and Houston Counties which indicate the abundance of weevils."

FLORIDA: Weather conditions were favorable for cotton in the Gainesville-Leesburg area and the crop made satisfactory growth but warm weather and rains were favorable for weevils. At McIntosh, 12% of the squares were punctured by weevils in upland cotton about the same as the previous week, but in Sea Island cotton, the infestation had increased to 9%, indicating that an influx of hibernating weevils had taken place.

MISSISSIPPI: Dr. Clay Lyle, Entomologist of the Agricultural Experiment Station and State Plant Board, reported on June 3 as follows: "Examinations made in a few counties during the past week by state and federal entomologists indicated that although weevils may not be quite as numerous as on this date last year, there are plenty present to destroy the crop if favorable weather for weevil increase occurs through June and July. Of 4 farms examined in Monroe County, 3 had weevils at the rate of 50, 100 and 150 per acre. In Clay County, one of 2 farms examined had 100 weevils per acre with a heavy louse infestation. In Montgomery County, of 2 farms examined one had 50, the other 150 per acre. In Calhoun and Attala, one farm out of 2 in each county had 50 weevils per acre. On 1 farm each in Lee and Yalobusha and 2 farms in Grenada County, no weevils were found. In Washington County, only 2 out of 30 fields examined had weevils, one with 50 and the other 150 per acre."



On June 6, the entomologist at the Delta Branch Experiment Station at Stoneville reported: "On this date a year ago when 93 fields in nine Delta counties were inspected, 19 were infested with an average of 82 weevils per acre, whereas this year 66 fields in eight Delta counties were inspected and 15 were found infested with an average of 283 weevils per acre."

Unless the growers in the southern Delta counties make a real fight against the boll weevil, the present prospect is that this insect will cause serious damage in that area. Boll weevils were found in all of the four fields examined in Warren County, in one field at the rate of 850 per acre and in another field at the rate of 500 per acre. Weevils were found in 7 of the 8 fields examined in Yazoo County, in one field at the rate of 500 per acre and in another at the rate of 450 per acre. Weevils were also found in 2 of the 7 fields examined in Sharkey County and in 1 of the 4 fields examined in Issaquena County. The present prospect is for light boll weevil damage during the early summer in the northern Delta counties. No boll weevils were found in the examination of 28 fields in Humphreys, LeFlore, and Sunflower Counties, and only one infested field was found in the examination of 16 fields in Washington County.

LOUISIANA: Cotton fields were examined in Madison Parish in the northeastern section of the State during the first week of June and boll weevils were found at an average rate of 210 per acre, as compared to 362 weevils in 1946, 213 in 1945, 90 in 1944, 247 in 1943, and 49 in 1942. In five other parishes in the southcentral portion of the State weevils were found at an average rate of 42 per acre. These findings indicate that sufficient weevils are present in the fields to cause serious injury to the crop unless they are controlled by hot, dry weather or by insecticides.

TEXAS: Cotton continued to fruit and make satisfactory growth in most areas of the State, but squares were not large enough in McLennan and Burleson Counties in the central portion of the State for weevil infestation records. Plant counts made in McLennan County average 29 weevils per acre and 36 per acre were found in Burleson County. Square infestation counts were made in 496 fields in 17 counties in the Coastal Bend, Lower Rio Grande Valley, and South Texas areas. No weevil infestation was found in 319 of the fields examined. In 155 fields less than 10% of the squares were punctured; in 15 fields the infestation was from 10 to 25%; in 6 fields it was from 25 to 50%; and in 1 field the infestation was more than 50%. These figures indicate a light initial infestation but growers should inspect their fields often and be prepared to dust for weevils as soon as infestation develops to justify control.

#### COTTON FLEAHOPPER

TEXAS: Cotton fleahopper infestation continues light. During the week ending June 7, 334 fields were inspected in Central, Coastal, and South Texas areas. In 56 fields no cotton fleahoppers were found; in 188 of the fields less than 10 hoppers per 100 terminal buds were found; in 69 fields from 10 to 25; in 13 fields from 25 to 50; and in one field more than 50 cotton fleahoppers per 100 terminals were found. Four fields were treated in Victoria County for cotton fleahopper control the past week and one in San Patricio County.



### COTTON APHID

MISSISSIPPI: Aphids were noted in 26 of the 66 fields examined in the Delta section of Mississippi.

FLORIDA: P. W. Calhoun at Gainesville reported the cotton aphid population was extremely low in all fields examined in Florida.

ARKANSAS: Aphid infestations have been reported as unusually heavy in the southeastern portion of the State, but populations are now being reduced by parasites and predators.

ALABAMA: Dr. F. S. Arant, Entomologist, Alabama Polytechnic Institute, Auburn, reported on June 9: "The cotton aphid has been very abundant throughout Central and South Alabama. In some instances the cotton aphid killed young plants outright in Macon, Escambia, Houston, and Geneva Counties and the land has been planted to other crops. Some nicotine dust has been applied in the control of the aphids, but these operations have not been extensive. Insect predators and parasites, together with the recent warm weather, have just about cleared up the situation at present and the condition of cotton is much improved."

### MISCELLANEOUS INSECTS

Rapid Plant Bug.--The rapid plant bug, Adelphocoris rapidus, was not reported as serious in any State, but was noted in 5 of 66 fields examined in the Delta section of Mississippi and was reported in moderate numbers in rank-growing cotton in Florida.

Thrips.--Thrips damage was detected in 50 of the 66 fields examined in the Delta section of Mississippi.

Tarnished Plant Bug.--The tarnished plant bug, Lygus oblineatus, was observed in 3 of the 66 fields examined in the Delta section of Mississippi.

Bagworms.--A report in regard to bagworms attacking cotton belonging to Mr. W. M. Paul, Wadley, Jefferson County, Georgia, came from Dr. Horace O. Lund, University of Georgia, Athens, Georgia, on May 17. The specimens collected by Mr. Paul were tentatively identified by H. W. Capps as early-stage larvae and cases of the orange bagworm, Platoeceticus gloveri Pack. Mr. Paul reported that the outbreak of these bagworms on cotton was confined largely to an area of about 2 acres, although they were scattered thinly over 35 acres of cotton. They caused serious damage to the young cotton plants, but were checked by the application of calcium arsenate dust.

### INSECTS ON IRRIGATED COTTON OF THE SOUTHWEST

Weekly surveys made in the Salt River, Santa Cruz, and Safford Valleys of Arizona and in the El Paso Valley of Texas showed a slight increase of Lygus and other plant bugs that attack cotton, on grain and alfalfa, but no reports have been received of damage to cotton from these insects.

June 12, 1947



